

Trade, Asymmetrical Dependence and Foreign Policy Behavior: An Analysis of Japan and Korea's Relationship with East Asian Countries

AREMU Fatai Ayinde
Department of Political Science
University of Ilorin, Ilorin, Nigeria

Abstract

It is believed that the behavior of states towards one another is influenced by the extent of economic linkages between them. One line of thinking could be that states that have a higher degree of economic connection would exhibit more positive behavior towards each other and vice versa. The positive relationship between the degree of economic dependence and political relations is challenged by the arguments of asymmetrical dyads theory, which contends that the higher the degree of concentration on a particular partner, the more the foreign policy behavior towards that partner. Given that higher economic concentration on a superordinate country may generate a feeling of vulnerability among the political elites in the dependent state, thereby propelling a desire for diversification and autonomy, such a proposition should not be utterly discountenanced. The debate on the nature of the relationship between various economic factors (trade, foreign direct investment, development assistance, etc.) and political relations between states remains a potent intellectual enterprise.

This research is driven by the desire to explore the connection between the degree of trade concentration of a partner and the foreign policy behavior in the asymmetrical context. There are two dyadic sets involving Japan and Korea as the superordinate countries, while nine East Asian countries are selected as subordinate samples. The period of study is from 1995 to 2005. Using ordinary least squares (OLS) estimation of a linear regression model with cross-sectional data, the study finds that trade concentration is significant and positively related to foreign policy behavior in Korea's dyadic set, however, there is no evidence that trade concentration has a significant effect on foreign policy behavior in Japan's set.

Keywords: asymmetrical dependence, East Asia, foreign policy behavior, Japan, Korea, trade concentration.

Introduction

That trade has certain effects on the external behavior of states is not in question; what is of interest is how great those effects are and what form they take. The nature of the nexus between a nation's external trade and its foreign policy orientation has attracted scholarly attention for decades. The conventional belief is that foreign policy behavior towards

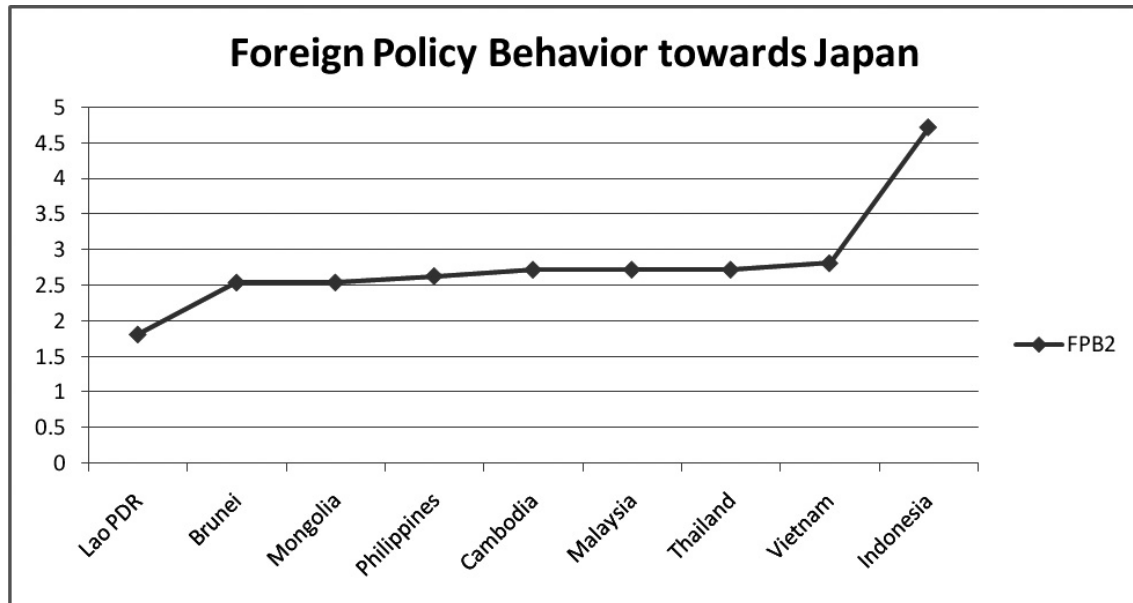
an economically stronger partner is more positive when trade ties with that partner are relatively stronger. Conversely, foreign policy behavior tends to be less positive when trade ties are negligible. While the impact of trade dependence on foreign policy behavior has been the focus of a good number of studies, the nature of the nexus between trade and foreign policy remains generally contested.

Following the existing tradition of scholarship, the current research begins with the assumption that one of the primary concerns of policy makers is a desire to improve the welfare of their citizenry, which requires the attraction of foreign capital via aid, investment, and favorable trade terms that catalyzes economic growth and development. At the same time, there is a countervailing objective of political autonomy, which states covet and are usually unwilling to part with. Often, there is an inverse relationship between the objective of economic well-being and political autonomy, whereby a desire to improve the economy necessitates a closer relationship (in the form of policy coordination, alignment, etc.) with an economically and technologically advanced partner. Such a closer relationship often requires some deference to the preferences of the superordinate target in order to attract the expected gains. This delicate balancing of the goal of economic well-being with that of political autonomy is particularly acute in economically weak and dependent political systems, and distinguishes them from economically strong and developed ones (Dolan et al. 1982).

Interstate relations take place in asymmetrical contexts, where the foreign policy behavior of a country on the lower side of the asymmetry is shaped by factors such as the relative strength of its economy and the degree of dependence on a particular partner (hereinafter termed linkage concentration). The degree of linkage concentration could be determined by the proportion of foreign direct investment, foreign aid, or trade that a dependent state has with a particular partner. In this study, the effects of trade dependence (import concentration and export concentration as separate variables) on foreign policy behavior is examined using Japan and South Korea as the superordinate samples, while nine Southeast Asian countries are used as subordinate samples.¹ The underlying assumption is that the higher the degree of trade concentration on a particular partner, the more positive the foreign policy behavior towards that partner. Conversely, a lower trade concentration on a partner is expected to produce less positive foreign policy behavior towards the target partner. In other words, it is assumed that there is a positive relationship between trade concentration and positive foreign policy behavior. This is the central thesis underlying the current study.

¹ The terms “superordinate” and “subordinate” are used here for analytical purposes only and are not meant to carry any paternalistic or derogatory connotations. Indeed, in asymmetry literature, such terminologies as “topdog” and “underdog,” “dominant” and “dependent,” and “large-country” and “small-country” are commonplace. These concepts are meant to draw a line, however contentious, between the upper and lower ends of the asymmetry pendulum.

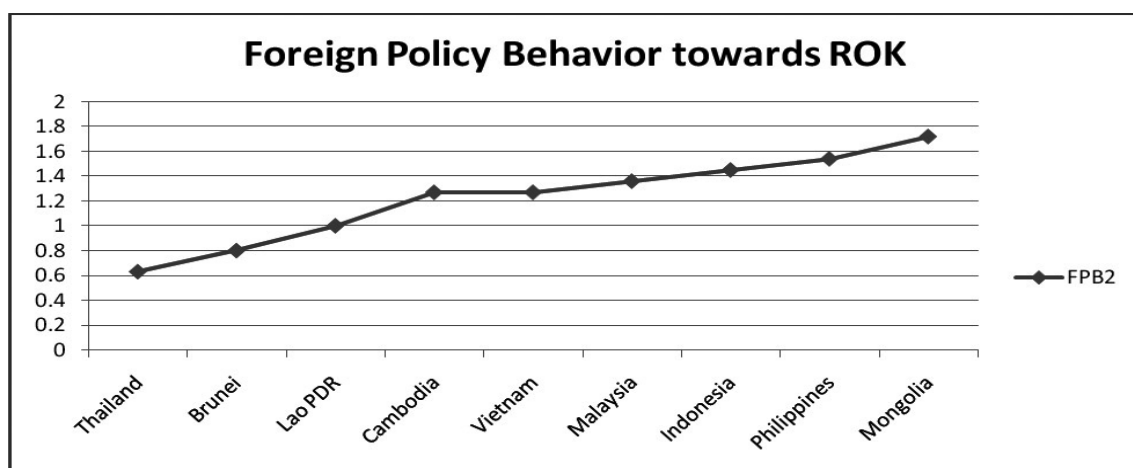
Figure 1



Source: Author's computation with data from the MOFA website (<http://www.mofa.go.jp/region/index.html>)

Figure 1 shows the foreign policy behavior of sampled East Asian countries towards Japan between 1995 and 2005. The procedure for the estimation of foreign policy behavior is explained in the methodology section. The figure shows that Indonesia has the most positive foreign policy behavior towards Japan, while Laos PDR has the most negative foreign policy behavior. A similar graph for Korea is presented below.

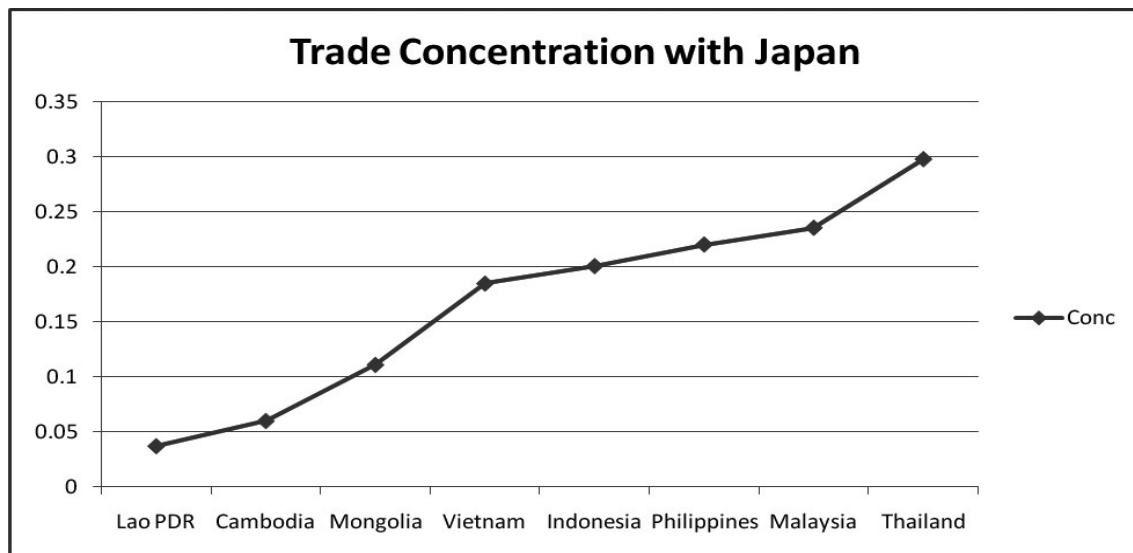
Figure 2



Source: author's computation with data from the MOFAT website (<http://www.mofat.go.kr/english>)

Figure 2 shows the foreign policy behavior of sampled East Asian countries towards the Republic of Korea (ROK) between 1995 and 2005. It reveals a different pattern from Fig 1. Unlike the case of Japan, Mongolia has the most positive foreign policy behavior towards ROK, while Thailand has the most negative foreign policy behavior.

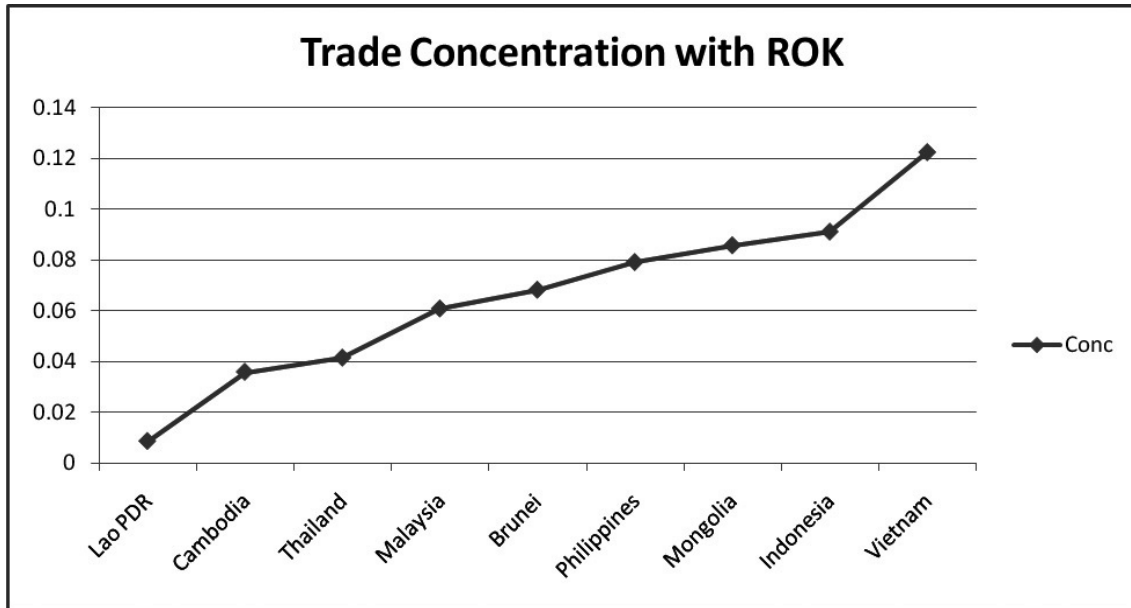
Figure 3



Source: Author's computation with data from Japan Customs, World Development Indicators (WDI) and UN Comtrade.

Fig. 3 shows the trade concentration with Japan by the sampled East Asian countries between 1995 and 2005. It reveals that Thailand has the highest trade concentration with Japan, while Laos PDR has the lowest trade concentration with Japan. When the trade concentration is juxtaposed with the foreign policy behavior, some patterns become discernible. While Thailand has the highest trade concentration with Japan, it does not have the most positive foreign policy behavior towards Japan. This tends to suggest that, based on preliminary analysis, that the nexus between trade concentration and foreign policy behavior is tenuous or non-existent. On the other hand, Laos PDR has the lowest trade concentration with Japan, and also exhibits the most negative foreign policy behavior towards Japan. This suggests that the effects of trade concentration on foreign policy behavior is, perhaps, more palpable at the lower echelons. The purpose of this research is to empirically test the nature of the relationship between trade concentration and foreign policy behavior, which graphical representation has not clarified sufficiently.

Figure 4



Source: author's computation with data from WDI and UN Comtrade.

A similar pattern is noticeable in the Korean case. There is an apparent incongruence between the countries that have the highest trade concentration with Korea and those with the most positive foreign policy behavior towards Korea. Although Vietnam posts the highest trade concentration with ROK, it does not display the most positive foreign policy behavior towards Korea. By the same token, while Laos PDR has the lowest trade concentration with ROK, it does not show the most negative foreign policy behavior towards Korea. This raises questions on the nature of the relationship between trade concentration and foreign policy behavior. Exploring this relationship is the primary objective of the current research.

While exploring the empirical validity of the projected relationship between trade concentration and foreign policy behavior is novel in itself, it does not reveal the relative impact and the nature of the separate effects of import and export activity on foreign policy behavior. Some studies argue that, from the perspective of a subordinate country, exporting is most likely to have a greater effect on foreign policy behavior, especially when the supply of the export commodities is elastic (Richardson and Kegley 1980). This is because if there are alternative suppliers of the same commodity, or if the commodity has a close substitute, a dependent country is more likely to deploy all its diplomatic resources towards retaining and consolidating the relationship with its existing trade partner. With regard to the effects of import on foreign policy behavior, except when the imported item is crucial to the survival of the state, its supply is inelastic, or there is no close substitute, its effect on foreign policy behavior may be less palpable. In addition to investigating the relationship between trade concentration with a particular partner and foreign policy behavior, this study disaggregates trade into import and export components in order to examine further the relative effect of each on foreign policy behavior.

Theoretical Background and Existing Scholarship

Among early scholarly attempts that synthesize economic factors with political forces in order to explain the structure and patterns of influence in international relations is Albert Hirschman's *National Power and the Structure of Foreign Trade* (Hirschman 1945). By looking at Germany's drive to expand its trade and political influence in Eastern and South-Eastern Europe in the inter-war years, Hirschman exposed the "structural characteristics" of international economic relations that, in his words, "make the pursuit of power a relatively easy task" (Hirschman 1978; 1998). To him, "power elements and disequilibria are potentially inherent in such 'harmless' trade relations ... between big and small, rich and poor, industrial and agricultural ..." (Hirschman 1998). The persuasive edge in Hirschman's thesis is as sharp today as it was then. To date, the political fallouts of foreign trade, development assistance and other economic activities are perennially palpable, in so far as "gains" or expected benefits from such transactions are unequal, depending on which country receives them and which bestows them.

Surprisingly, despite the fact that international economic factors have long been assumed to affect foreign policy behavior, only a few scholars have ventured into the minefield of quantitative and cross-national investigation of this political-economic proposition. Among such scholars is Wittkopf, with his study of the voting behavior of foreign aid recipients in the United Nations General Assembly (UNGA) (Wittkopf 1973). The purpose was to compare the voting (roll-call) agreement between donors (and their foreign aid recipients) with the voting patterns of non-recipient countries. In a study that involved 14 aid donors, it was found that the level of voting agreement was higher among the recipients of U.S. aid than among recipients of aid from other donors. A similar approach was applied by Neil Richardson to examine the influence of foreign trade on foreign policy behavior (Richardson 1976). Using the UNGA voting agreement between the United States and a group of states that were trade-dependent on it, Richardson discovered a positive relationship between trade dependence and positive foreign policy behavior (proxied by UNGA roll-call votes) (Richardson 1976). In other words, the higher the degree of trade dependence on the United States, the greater the voting agreement with the United States, and vice versa.

The findings from the two studies described above provide empirical support for the proposition that economic forces influence the behavior of states towards each other, depending on which state is the beneficiary and which is the benefactor. Another study that adopts a similar theoretical thrust was conducted by Rothgeb, whose study differed from Wittkopf's and Richardson's by using investment penetration rather than aid or trade as a measure of dependence (Rothgeb 1987). In an elaborate study, Roeder combines aid and trade to examine the extent of political compliance by the Soviet Union-dependent countries (Roeder 1985). He finds that trade dependence on the Soviet Union provides a significant source of political compliance with the Soviet Union. Interestingly, Roeder's study sheds light on an important proposition; that trade, rather than economic aid, is an important source of direct influence.

The pioneering efforts of the scholars described above have brought us closer to understanding the nexus between economic factors and foreign policy behavior of states. However, most of the findings have generally been tentative, inconclusive, and sometimes contentious. This renders further inquiry into the subject a potent intellectual enterprise. Ironically, such studies have been few and far between, and almost entirely lacking in

Asian setting, where applying this theoretical proposition is not only useful, but novel. This study is a contribution towards filling this vacuum. Following the existing tradition of scholarship, the central assumption of the current research is that trade concentration has a positive effect on foreign policy behavior. Put differently, high trade concentration on a partner should produce more positive foreign policy behavior towards that partner, and vice versa. This proposition and other related ones will be explored and tested in the course of the study.

Variables, Samples and Methodology

Variables

The dependent variable is foreign policy behavior, while the independent variables include economic strength, linkage concentration, and ratio of imports with the superordinate partner to total imports, as well as ratio of exports to the superordinate partner to total exports. In order to measure foreign policy behavior, event data approach is used in this research. This entails, by some rules of inclusion and exclusion, the collation of data from events that involved each of the dyads within the period of study. This is based on the belief that the behavior of states towards one another is captured by the number of “events” that take place between them. In other words, countries with (or that are willing to develop) stronger relations are likely to record more events, and vice versa. The use of event data in international relations research could be said to have evolved from McClelland’s pioneering efforts in the 1960s, from which a number of other event data sets sprang.² Although event data collection nose-dived in the mid-1980s, the approach has experienced a revival because it remains valuable to “systematically code a very large number of individual foreign policy interactions and then use that information to test general hypotheses about foreign policy behavior using statistical techniques” (Schrodt 1995).

One of the foremost proponents of event data in quantitative international relations research is Rummel, who identifies two ways of coding foreign policy events. These include *frequency* of events and *scaling/weighting* of events. According to him, “frequencies stay close to events, minimize assumptions, and allow the data themselves to show the patterns” (Rummel 1972). However, the problem is that the frequency technique assigns equal weights to different event types, irrespective of the nature and *real* consequences of those events. Scaling/weighting of events corrects for the weaknesses of the frequency coding technique. In the current research, both approaches are combined to avoid the weaknesses inherent in each. In other words, the total frequency of the events as well their respective weights are accounted for in the estimation of foreign policy behavior.

The next step is to determine which “event” to include (or exclude) as proxy for the dependent variable, as well as how to assign weights to them. To do this, it is necessary to revisit the conception of the term “event”. It is noteworthy that, despite the increasing popularity of the usage of event data in foreign policy analysis, there is no consensus on what constitutes an event. The Conflict and Peace Data Bank (COPDAB) project defines events as:

² These include, among others, The Conflict and Peace Data Bank (COPDAB), World Event Interaction Survey (WEIS), Dimensionality of Nations (DON), and the Comparative Research on the Event of Nations (CREON). For details on these event data projects, see Azar 1980: 143-152; McClelland 1976; Rummel 1972; Hermann et al. 1973 respectively.

... occurrences between nations which are distinct enough from the constant flow of “transactions” (trade, mail flow, travel, and so on) to stand out against this background as “reportable” or “newsworthy.” Thus, to qualify as an “event,” an occurrence has to be actually reported in some reputable and available public source. (Schrodt et al. 1994).

The above definition serves as a useful conceptual framework in delineating what constitutes an “event.” From the definition, it is clear that the “events” must have been reported in publicly available and reputable source(s) to qualify for inclusion. It also implies that an event involves some activity by an actor towards another within a specified period of time.

For analytical convenience, I follow McGowan’s construction of scale values and indicators of foreign policy behavior, which includes stated *official* desires or actions that indicate an actor’s intention to increase, reduce, withdraw, or terminate relations with the target partner (McGowan 1972). The word *official* is very instructive here. Only officially recognized, sponsored, or sanctioned events or activities merit inclusion. Unlike other event data sets that rely on journalistic sources, this research obtains information on events from official sources. Basically, official events, such-as top-level visits, summit meetings, agreements/treaties, as well as cultural exchanges that are reported and publicly available, qualify for inclusion.

However, since events usually do not carry equal weights, there is a need for further clarification. McGowan’s scale, which the current research uses, ranges from (-2) to (+2). “Withdrawal” (-2) signifies an actor’s desire or action that suggests an intention to withdraw from or terminate all relations with the superordinate partner. “Reduction” (-1) indicates an actor’s desire or action that signifies an intention to reduce political, economic, and other forms of relations with the partner. “Neutral” (0) occurs when an actor displays no particular concern with either increasing or reducing relations. It also includes unclear or ambiguous situations. “Increase” (+1) describes an actor’s desire or willingness to increase diplomatic, economic, cultural, and other forms of interaction with the superordinate target. This includes attendance at conferences, summit meetings, and top-level visits (McGowan 1972).³ Absorb/Integrate (+2) indicates a stated action or desire that demonstrates an actor’s desire to strengthen its relations with the superordinate country in such a way as to absorb or integrate with the target (McGowan 1973-1976).⁴

³ Here, I have made a slight modification to McGowan’s scale. Because exchange visits and summit diplomacy vary according to the status of the officials involved, assigning equal values (+1) would not adequately capture the essence of the indicator, and may be misleading. Therefore, visits by presidents, prime ministers, and their deputies are taken as a high indication of desire to increase relations, and a value of (+2) was assigned. The same applies to visits by Imperial Majesties and other constitutional monarchs. Visits that involve the King, Queen or Crown Prince are assigned (+2), while visits by other royals are coded (+1). Other government officials, like ministers of foreign affairs and equivalent, as well as lower-ranked officials, were coded (+1).

⁴ Because these are dyadic relations, integration (usually multilateral in nature and scope) has little conceptual relevance. Nonetheless, in cases where there is an Economic Partnership Agreement (EPA) that has been ratified by the parliaments of the states concerned, a rating of (+2) was assigned. This is because an EPA is considered a strong indication of intention to amplify relations with the target. For other agreements, such as an Investment Protection and Promotion Agreement (IPPA), etc., a value of (+1) was assigned.

Having discussed the coding procedure, foreign policy behavior between each set of dyads is estimated using the formula below:

$$FPB = \frac{\sum(\text{frequency of events on each scale value} \times \text{scale value})}{\text{total number of years.}}$$

Although McGowan's scale offers an interesting numerical procedure for estimating a state's foreign policy behavior, there are certain drawbacks to its application in the current study that deserve to be highlighted. First, there is no single comprehensive data bank⁵ on foreign policy events and activities of the subordinate samples from which the study can draw data. If there were such a data pool, it might have been possible to estimate the foreign policy behavior, in addition to the simple dyadic calculation, as a proportion of each state's total external events within some timeframe. Such comprehensive data would have equally allowed for annual variations in the frequency and weight of the proxies that would lend the study to fixed effect empirical analyses.⁶ Second, following from above, it is difficult to establish the exhaustiveness and comprehensiveness of the foreign policy data available to this study. As a result of the lack of a single comprehensive data bank, the research relied on official data sources.⁷ The formula for the estimation of foreign policy behavior is given as:

$$FPB = \text{frequency of events on each scale value} \times \text{scale value} / 11$$

With respect to the independent variables, they are operationalized as follows:

Economic Strength (E)

$$E = \{(\text{GDP}) + (\text{GDP per capita}) + (\text{energy use}) + (\text{energy use per capita})\} / 4$$

$$\Delta E = \{(\% \Delta \text{ in GDP}) + (\% \Delta \text{ in GDP per capita}) + (\% \Delta \text{ in energy use}) + (\% \Delta \text{ in energy use per capita})\} / 4$$

Trade Concentration

$$C = \{(\text{exports to major sample} \div \text{total exports}) + (\text{imports from major sample} \div \text{total imports})\} / 2$$

$$\Delta C = \{(\% \Delta \text{ exports to major sample} \div \% \Delta \text{ total exports}) + (\% \Delta \text{ imports from major sample} \div \% \Delta \text{ total imports})\} / 2$$

⁵ Such as the Africa Project data that provided the base for Dolan et al. 1980: 415-449, or DON project that offered the springboard for Rummel 1979, the WEIS data that served as the wellspring for studies such as Wilkenfeld et al. 1980, or the COPDAB in Azar 1980: 143-152, also used in Rothgeb, Jr. 1987: 227-265.

⁶ The Fixed Effect model allows for tests on the impact of the exogenous variable on the variations in the endogenous variable.

⁷ For dyads involving Japan, data was collected from the website of the Gaimusho (Ministry of Foreign Affairs, MOFA), the Diplomatic Bluebook and the websites of the ministries of foreign affairs of subordinate samples in the dyads, as well as the respective diplomatic missions. With respect to the Korean dyadic set, data was retrieved from the website of the Ministry of Foreign Affairs and Trade of Korea (MOFAT) and the websites of the ministries of foreign affairs of the respective subordinate samples in the set, as well as the websites of the diplomatic missions. This collation approach concurs with the COPDAB's conception that for an "event" to qualify for inclusion, it must be reported in a public source.

Table 1: Variable Description and Data Sources

Foreign Policy Behavior	Japan's Ministry of Foreign Affairs http://www.mofa.go.jp/region/index.html Korea's Ministry of Foreign Affairs and Trade http://www.mofat.go.kr/english
Economic Strength (E) Change in Economic Strength (ΔE)	World Development Indicators (WDI) US Energy Information Agency
Trade Concentration Change in Trade Concentration (ΔC)	World Development Indicators (WDI) World Trade Atlas (Japan Customs Data) UNCTAD Handbook of Trade Statistics UN COMTRADE

Table 2: Main Samples and Subordinate Samples

Main Samples	
Japan	Korea
Subordinate Samples	
Brunei Darussalam, Cambodia, Indonesia, Laos PDR, Malaysia, Mongolia, Philippines, Thailand, Vietnam	
For each of the major samples, there are nine dyads over 11 observational years (1995-2005).	

Empirical Models

Foreign Policy Behavior = $f(\text{Economic Strength, Trade Concentration, } \dots u) \dots \dots \dots (1)$

In order to account for other omitted environmental and control variables, the simplified specification of this model takes the functional form:

$$FPB_i = \beta_0 + \beta_1 \log E_i + \beta_2 C_i + u \dots \dots \dots (2)$$

$$FPB_i = \beta_0 + \beta_1 \log E_i + \beta_2 C_i + \beta_3 rimp_i + \beta_4 Z_i + u \dots \dots \dots (3)$$

Where FPB is foreign policy behavior, E is relative economic strength, C is trade concentration, $rimp$ is the ratio of import concentration, i indexes the country under study, z represents the set of additional explanatory variables, and u is the error term.

Ordinary least squares (OLS) estimation of a linear regression model using cross-sectional data is used. This is because “the OLS model permits inferences with respect to the *direction* and *strength of causality* between a dependent variable and a set of independent variables” (Johnson et al. 1987). Variables E and C are lagged for a year in order to account for delayed impact of the explanatory variables, and to avoid endogeneity of any of the explanatory variables with the dependent variable. A test for homoskedasticity was conducted. This is in conformity with Gujarati’s warning that “[i]n short, if we persist in using the usual testing procedures (OLS) despite heteroskedasticity, whatever conclusions we draw or inferences we make may be very misleading” (Gujarati 2003:399). Breusch-Pagan (P-value = .9208) and White’s test (0.342) confirm that the

variance of the error term is constant, meaning that it is not heteroskedastic.

Empirical Results and Main Findings

Based on the proposition set out earlier, a positive relationship between trade concentration and foreign policy behavior is expected. The results from the analysis of the effects of the independent variables (economic strength, trade concentration, import concentration, and export concentration) on foreign policy behavior with respect to Japan and Korea's dyadic sets are presented in Table 3. In Japan's dyadic set, there is no evidence that economic strength and trade concentration have a significant effect on foreign policy behavior. On the other hand, the results from the analysis of Korea's dyadic set reveal that economic strength has a positive effect on foreign policy behavior. In other words, foreign policy behavior between Korea and countries with stronger economies is more positive compared with that between Korea and countries that have weaker economies. The positive coefficient rejects the proposition of asymmetrical dyads theorists, which contends that there is an inverse relationship between relative economic strength of subordinate countries and foreign policy behavior towards a superordinate target. Contrary to that assumption, foreign policy behavior appears to be more positive with countries that have stronger economies. This finding should not be too surprising, given the transformations in the global political economy, which is now markedly different from the Cold War years, when most asymmetrical theories on foreign policy behavior were churned out. In today's world, the stronger the economy of a country becomes, the more integration into the network of global trade and investment the country experiences, and the more expansionary its foreign policy behavior towards superordinate target countries becomes. This may explain why the coefficient did not move in the direction predicted by theories on asymmetrical foreign policy behavior.

With respect to the effect of trade concentration on foreign policy behavior, the results from the analysis did not support the hypothesized relationship in both sets. In Japan's dyadic set, there is no evidence of a significant relationship between the two variables. However, results from the analysis of Korea's set yields some interesting findings. Trade concentration is statistically significant at the 5% level, implying that the degree of trade concentration on Korea influences foreign policy behavior towards Korea. Contrary to the expected relationship, the result reveals a negative relationship between the degree of trade concentration on Korea and the foreign policy behavior towards ROK. This suggests that high trade concentration yields negative foreign policy behavior. Put differently, countries that have a high trade concentration with Korea exhibit more negative foreign policy behavior towards Korea. While this finding contradicts the proposition of the current research, there is theoretical support for the finding. Theories of asymmetrical foreign policy behavior assume a negative relationship between the degree of linkage concentration and foreign policy behavior.

Table 3: Results of OLS Regression Estimates for Japan and Korea's Dyadic Sets

Variables	Japan	Korea
Economic Strength	0.0027 (0.044)	1.911** (0.371)
Trade Concentration	1.906 (2.87)	241.08** (57.3)
Change in Economic Strength	0.009 (0.02)	0.33** (0.065)
Change in Trade Concentration	121* (.052)	20.7** (3.53)
Import Concentration	1.04 (0.67)	223.6** (54.07)
Export Concentration	0.023 (0.271)	67.94* (17.78)
Constant	1.14	14.27
R-Square	0.65	0.88
No. of Observations	9	9
Time Period	11	11

Notes: The figures in parentheses below the estimates are standard errors; *, **, and *** are statistically significant at 10%, 5% and 1%, respectively.

This is because, according to exponents of the theory, high linkage concentration elicits some elements of vulnerability, which propels a movement of contractionary behavior towards a superordinate target (Dolan et al. 1980).

The results from the analysis of the effect of change in economic activity on foreign policy behavior shows different outcomes in Japan and Korea's dyadic sets. In Japan's set, change in economic strength of the subordinate states does not have a statistically significant effect on foreign policy behavior. On the other hand, the variable has a statistically significant effect on foreign policy behavior in Korea's set. This implies that as countries experience relative growth in their economic strength, foreign policy behavior towards the ROK becomes less positive, which confirms the prediction of the asymmetrical dyads theory.

The analysis of the relationship between change in trade concentration and foreign policy behavior for the two dyadic sets also shows different findings. In Japan's set, the analysis reveals that change in trade concentration has a statistically significant and negative effect on foreign policy behavior. This suggests that incremental change in trade concentration with Japan does not produce increasingly positive foreign policy behavior. On the other hand, the variable is statistically significant and positively related to foreign policy behavior in Korea's set, suggesting that incremental change in trade concentration yields more positive foreign policy behavior.

In order to explore the specific effects of import and export on foreign policy behavior as part of the objectives of the current research highlighted in the preceding sections, trade concentration was decomposed into import concentration and export concentration. When the analysis was conducted, the results showed a similar pattern to previous results in Japan's dyadic set. Neither import concentration nor export concentration has a significant effect on foreign policy behavior. Meanwhile, a similar analysis of Korea's set shows that import concentration and export concentration are

statistically significant at the 5% and 10% levels, respectively. The positive coefficients of the two variables suggest that the higher the import concentration and the higher the export concentration, the more positive the foreign policy behavior in Korea's dyadic set. It could also mean that countries that have high levels of import or export links with Korea have more positive foreign policy behavior towards Seoul.

Conclusion and Further Research

From the foregoing analyses, there are two main discernible patterns in the relationship between trade the degree of trade concentration on a superordinate partner (alongside other variables) and foreign policy behavior. Japan's dyadic set, in which trade concentration has a limited influence on foreign policy behavior, exemplifies one pattern. It is possible that, perhaps, Foreign Direct Investment (FDI), Official Development Assistance (ODA) or some combination of these economic variables may yield a palpable influence on foreign policy behavior. Future research may explore the relationship between economic factors and foreign policy with respect to Japan's relationship with selected states. Meanwhile, the analysis of Korea's dyadic set offers some useful insights into the relationship between trade concentration and other economic factors on foreign policy behavior.

This study finds that the relative economic strength of the sample East Asian countries is a significant factor that determines their foreign policy behavior towards the ROK. Contrary to the assumption of asymmetrical dyads theorists, economic strength has a positive effect on foreign policy behavior. By the same token, trade concentration is a significant factor in Korea's dyadic set, but the negative coefficient confirms the prediction of asymmetrical dyads, while it negates the expectation of the current research. Interestingly, when trade concentration was disaggregated to separate variables (import concentration and export concentration), each of the variables was found to be a significant determinant of foreign policy behavior in Korea's set. The positive coefficients suggest a direct relationship with the dependent variable, and support the primary assumption of the current research.

References

- Azar, E. Edward. 1980. "The Conflict and Peace Data Bank (COPDAB) Project." *The Journal of Conflict Resolution* 24(1) (March): 143-152.
- Dolan, Michael B., Brian W. Tomlin, Maureen Appel Molot and Harald von Riekhoff. 1980. "Foreign Policies of African States in Asymmetrical Dyads" *International Studies Quarterly* 24 (3) (Sept): 415-449.
- Dolan, B. Michael, Harald von Riekhoff, Brian W. Tomlin and Maureen Appel Molot. 1982. "Asymmetrical Dyads and Foreign Policy: Canada-U.S. Relations, 1963-1972." *The Journal of Conflict Resolution* 26(3) (September): 387-422.
- Gujarati, N. Damodar. 2003. *Basic Econometrics* (International edition) (4th ed). New York: McGraw Hill.
- Hermann, Charles, Maurice A. East, Margaret G. Hermann, Barbara G. Salmore, and Stephen A. Salmore. 1973. *CREON: A Foreign Events Data Set*. Beverly Hills: Sage Publications.
- Hirschman, O. Albert. 1945. *National Power and the Structure of Foreign Trade*. Berkeley:

- University of California Press.
- Hirschman, O. Albert. 1978. "Beyond Asymmetry: Critical Notes on Myself as a Young Man and on Some Other Old Friends." *International Organization* 32(1) (Winter): 45-50.
- Hirschman, O. Albert. 1998. *Crossing Boundaries: Selected Writings*. New York: Zone Books.
- Johnson, C. Aaron, Marvin B. Johnson and Reuben C. Buse. 1987. *Econometrics: Basic and Applied*. New York: Macmillan.
- McClelland, Charles. 1976. *World Event/Interaction Survey Codebook* (ICPSR 5211). Ann Arbor.
- McGowan, Patrick. 1972. "A Manual and Codebook for the Identification, Abstraction and Coding of Foreign Policy Acts." New York: Syracuse University Africa Project Research Report 1.
- McGowan, Patrick. 1973-1976. *Southern African Subsystem Events Data*. Ann Arbor, MI: Inter-University Consortium for Political and Social Research, and Pretoria, South Africa: South African Data Archive.
- Ministry of Foreign Affairs and Trade of Korea. <http://www.mofat.go.kr/english> (accessed 25 February 2008).
- Ministry of Foreign Affairs of Japan. <http://www.mofa.go.jp/region/index.html> (accessed 25 February 2008).
- Richardson, R. Neil and Charles W. Kegley, Jr. 1980. "Trade Dependence and Foreign Policy Compliance: A Longitudinal Analysis." *International Studies Quarterly* 24(2) (June): 191-222.
- Richardson, R. Neil. 1976. "Political Compliance and U.S. Trade Dominance." *American Political Science Review* 70: 1098-1109.
- Roeder, G. Phillip. 1985. "Ties that Bind: Aid, Trade, and Political Compliance in Soviet-Third World Relations." *International Studies Quarterly* 29: 191-216.
- Rothgeb, M. John Jr. 1987. "Trojan Horse, Scapegoat, or Non-Foreign Entity: Foreign Policy and Investment Penetration in Poor Countries." *The Journal of Conflict Resolution* 31-2 (June): 227-265.
- Rummel, J. Rudolph. 1972. *The Dimensions of Nations*. Beverly Hills: Sage Publications.
- Rummel, J. Rudolph. 1979. *Understanding Conflict and War: War, Power and Peace* (Vols 1-5). Beverly Hills: Sage Publications.
- Schrodt, A. Phillip. 1995. "Event Data in Foreign Policy Analysis" in *Foreign Policy Analysis: Continuity and Change in Its Second Generation*, Laura Neack, Patrick J. Haney and Jeanne A. K. Hey, (ed). Eaglewood Cliffs, N.J.: Prentice Hall.
- Schrodt, A. Phillip, Francisco, A. Ronald, Gerner, J. Deborah, Weddle, L. Judith. 1994. "Machine Coding of Event Data Using Regional and International Sources." *International Studies Quarterly* 38(1): 91-119.
- Wilkinfeld, Jonathan, Gerald W. Hoppo, Paul J. Rosa and Stephen J. Andriole. 1980. *Foreign Policy Behavior: The Interstate Behavior Analysis Model*. Beverly Hills: Sage Publications.
- Wittkopf, R. Eugene. 1973. "Foreign Aid and United Nations Votes: A Comparative Study." *American Political Science Review* 67: 868-888.
- World Development Indicators Online Database. <http://ddp-ext.worldbank.org> (accessed 25 February 2008).

UN COMTRADE Database. <http://comtrade.un.org/db/> (accessed 25 February 2008).
UNCTAD Handbook of Trade Statistics. <http://stats.unctad.org/handbook>